NORTH AMERICAN
MACHINE &
COOPERAGE CO.

TRAPP'S PATENT
BARREL MACHINERY

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PATENT BARREL MACHINERY,

MANUFACTURED BY THE

NORTH AMERICAN

MACHINE & COOPERAGE COMPANY,

ELMIRA, N. Y.

M. H. FERRIS, AGENT.

ELMIRA, N. Y.
FAIRMAN & CO'S STEAM PRINTING ESTABLISHMENT.
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AWARDED WM. TRAPP & CO.
EXHIBITION
OF THE
INDUSTRY
OF ALL NATIONS,
NEW-YORK
1853.

A NEW THING ENTIRELY!

The most astonishing thing heard of: Barrels, Firkins, Kegs, and the whole Cooper Family Made and Finished without a defect. Air Tight, and smooth enough to Varnish:—Entirely by Machinery:

OUR MACHINE, with the tools used to perform the work, is a patent, for which we have received Gold and Silver Medals and State Diplomas; and last, though not least, the first and ONLY Premium on Keg and Barrel Machinery, by Jury D., at the Crystal Palace Exhibition of all Nations, 1853.

It takes the timber in the bolt, saws the staves hollowing with the grain, cuts them all of equal length, planes both inside and outside perfectly smooth, tries the quality of the timber, joints them in a perfect manner, giving each stave its proper proportion of bilge, according to its width, be it wide or narrow, hollows, cuts the croze, turns the head and prepares the Barrel or Keg for the hooping process, in a manner so perfect, complete and well finished, that we challenge the world to produce a better Barrel, Firkin or Keg, than our Machines make at the rate of three hundred per day to the single set—to which we invite the particular attention of all who choose to give them an inspection.

We manufacture with our machines, all kinds of Cooper Work, from the smallest White Lead Keg to the largest Cask in general use—all of which can be warranted to hold the most subtle liquids, or be adapted to the packing of dry-goods. In fact, the machines cannot make an imperfect article, except the defect is exclusively in the timber.

We have a shop at Elmira, N. Y., directly on the line of the New-York and Erie, Williamsport and Elmira, and Elmira and Niagara Falls Railroads, five minutes' walk north of the Depot, where any persons who wish can witness the operation of these Machines, and test to their perfect satisfaction every branch of the work.

It is conceded by all competent judges who have examined this Machine, that it surpasses everything that has been or can be in-

vented for the same purpose, and must entirely supercede all hand coopering.

Persons desirous of purchasing the Right and Machines for any location now unsold, can obtain any information in relation thereto, by applying to us as above.

A BARREL MACHINE AT WORK.

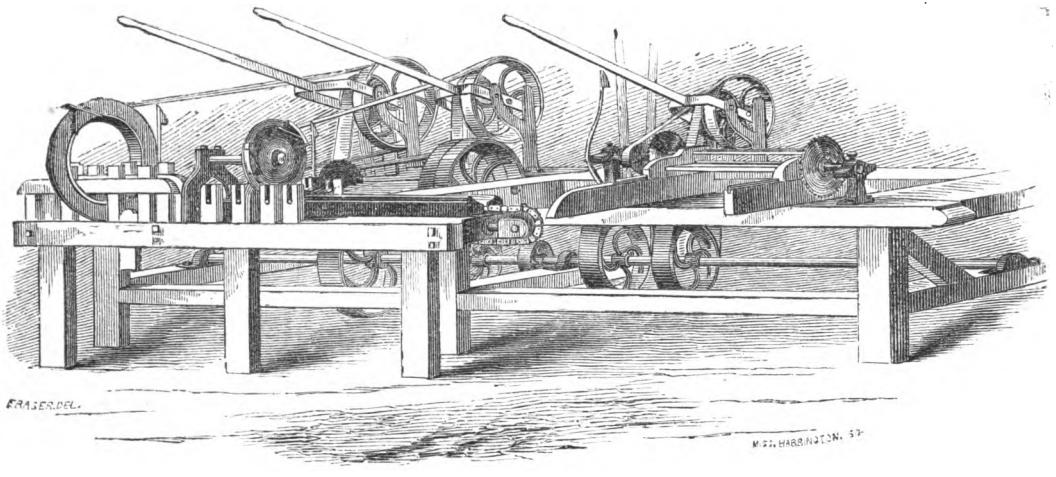
ELMIRA Inventions attract deserved attention abroad. The Chicago *Free Press*, of a recent date, mentions a visit paid to a Barrel Factory, where one of TRAPP'S PATENT MACHINES was in operation. Says that paper:

"In company with several gentlemen we paid a visit yesterday afternoon to the Barrel Manufactory near the Lake Shore on the north side. We had heard often of the wonder-working of the Machine there put up, and were a little anxious to inspect it. It is one of TRAPP'S Patent, and is owned by B. Carpenter and G. W. P. Bowman. We found it running in fine order. The stock which it works is sawed out in the rough by machinery in the extensive timber lands of the proprietors, on the opposite side of the lake, south of St. Joseph.

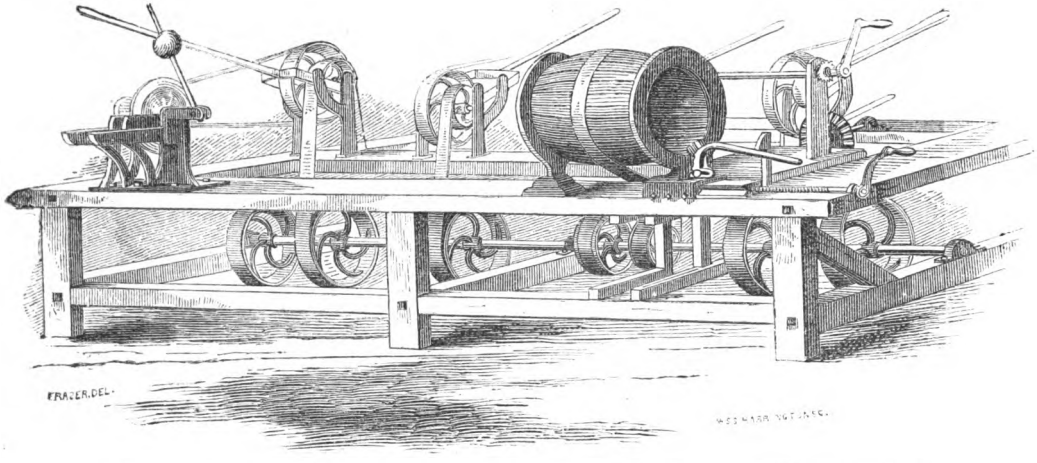
"There are half a dozen different pieces of Machinery through which the stock passes before the barrel is produced, but so simple are they, and so easily attended, that workmen of ordinary good intelligence learn very readily to manage them. The rough staves are first cut the right length and dressed inside and out, making them circular in shape and of perfectly even thickness. The joints are then dressed while the stave is held in a frame in just the position it will occupy in a barrel, so that the edges are finished with perfect mathematical precision. The staves are then set up in iron hoops and are placed in a lathe where the crozing and chamfering are done. The barrel is now ready for heading and hooping. The heads are also dressed by machinery, and so finely does it work that the nice hollowing of the joint of the head is given with more perfection than can be done by hand. The barrels when finished are all of one size, perfectly round and complete in every particular.

"The rapidity with which work is done is astonishing. Six men tend the machinery, and eight are busy heading and hooping. Twenty barrels are made in one hour, and one hundred or one hundred and ten is a fair day's work.

"The cost of making barrels by this machine is found to be two-thirds less than by hand, while a much better article is produced. The advantages are that the staves are cut from the *bolt*, and not from the sawed plank; the staves are sawed, and not cut with a knife, which shatters the timber; the stuff is not steamed, which loosens the fibres of the wood; the staves are sawed *with the grain;* the staves are not jointed until the stuff is thoroughly seasoned; the machine makes the joints and bevel with mathematical precision, whatever their width may be, all staves, whether wide or narrow, having their proportionate bilge and bevel; there is but little waste in stock, as they make the width of each stave to suit the size of the bolt; the staves are each the segment of a circle, and when set up the cask is obliged to be perfectly round, which makes the head as tight as any other part of the cask; and the casks are all of them perfectly water tight, and smooth inside and out."



In and Outside Dresser and End-off Saws.



Crozing, Chamfering and Howelling Works, and Head Lathe.

CERTIFICATES.

This is to certify that I have had in operation a machine of "Trapp's Patent," from the Factory of the "North American Machine and Cooperage Co." at Elmira, N. Y., for the manufacture of spirits of turpentine Barrels. I believe it to be the best and most economical mode of making Cooper-ware; its work being *tighter, smoother,* more *uniform and cheaper* than that of any process with which I am acquainted. I can with pleasure recommend it to all persons who are or contemplate being engaged in the manufacture of Barrels, Kegs, &c.

Franklinville, N. C., May 5, 1856.

WM. W. CLARK.

This is to certify that I have been engagad in the manufacture and use of Flour Barrels for the last five years, and have examined different kinds of Machines in use, and have found none that compares with those made by the North American Machine and Cooperage Co., at Elmira, Chemung Co., N. Y. I purchased one of those Machines for making Flour Barrels for Messrs. Cassel & Galigher, millers of this place, which is now in use by them to their entire satisfaction, making a stronger, tighter, and more perfect Barrel than can be made in any other way.

Zanesville, Ohio, April 10, 1856.

LEWIS H. GREEN.

This is to certify that I have been making Liquor Barrels for the last six months from staves sawed by the North American Cooperage Co., of Elmira, N. Y., and find them to answer all purposes of rived staves, and the barrels are made with less labor.

Simsbury, Ct., Aug. 14*th*, 1856.

WHITING SHEPARD.

Jeffrey's Store, Nottoway Co., Va., May 8, 1856.

This will certify that I purchased in the year 1854, one of "Trapp's Patent Flour Barrel Machines," and that its operation is satisfactory to me. Its work is more uniform, tighter, smoother, and I believe cheaper, than that of any proof of Barrel making which has come under

my observation. I can fully recommend it to those who are in want of Cooper-ware, or who are desirous of investing in a profitable business. W. C. KNIGHT.

To M. H. FERRIS, Ag't N. Am. Machine & Cooperage Co., Elmira, N. Y.

To the North American Machine and Cooperage Co.
ELMIRA, N. Y.:

I have in use one of your Pork and Flour Barrel Machines; also a machine for Butter Firkins and California Cases. It is admitted by all who have purchased my ware, that I make a better Pork, Beef and Flour Barrel, Butter Firkins, and California Case, than is made by hand. My work being generally preferred to hand work, and will command a higher price. My machines pay a profit of fifty per cent. I am confident from actual experience that one man on a machine will turn out more and better work in ten hours, than four hand coopers can do in the same time. I have no hesitation in recommending it to those who make use of Cooper-ware, or who desire to make a profitable investment.

Unionville, O., May 28, 1856. R. POOLER

This is to certify that I have in operation one of "Trapp's Patent Flour Barrel Machines," from the Manufactory of the "North American Machine and Cooperage Co.," at Elmira N. Y., that I believe it to be the best and most economical mode of making Cooper-ware, its work being *tighter*, smoother, more uniform and *cheaper* than that of any other process with which I am acquainted. I can cheerfully recommend it to all those who are in want of Cooper-ware, or who are desirous of engaging in a profitable business.

Seneca Falls, N. Y., April 28, 1856.

DAVID YOUNG.

M. H. FERRIS, Agent, N. A. M. & C. Co.—It gives us pleasure to add our testimony in regard to the merits of your Machinery. We are Manufacturing Pork, Flour and Fish barrels of the different sizes, with the Machines purchased of you one year since. We are satisfied by practical experience that the capacity of your Machinery is not

overrated in your statement. Our work is universally commended. and in fact, commands a preference in the market over hand made ware, being tighter and stronger ; while the perfect uniformity of the casks is a very important consideration.

In regard to the details of your Machinery, we can recommend it as being well made, having the qualities of *simplicity, durability* and *strength.* Yours, truly.

Newburgh, Orange Co. N. Y. C. R. COLDEN & CO.

This will certify, that in the year 1850, we purchased one of Trapp's Patent Machines for the Manufacture of Powder Kegs. We have had it in operation since that time, and can cheerfully certify to its efficiency. The immense saving in labor and expense makes it invaluable in our business, (as we pack 50,000 kegs of powder annually,) while the uniformity, neatness, and superior quality of the kegs command for them a preference in the market over hand work.

We have had occasion to examine many kinds of Barrel Machinery in use, but have never seen anything but this which we could recommend as being practical in every particular. We were called upon recently at our establishment, by the proprietor of a machine, who claimed a superiority over all other machinery for powder kegs. On examination, we were compelled to inform him, candidly, that our machine would make *two* to his *one*, of equally as good a quality and at far less expense.

We are entirely disinterested in these statements, having no connection with the manufacturers of the Machinery, or with the Patent ; but finding by experience that it is practical and useful, we can with pleasure recommend it to those interested—either in manufacturing Cooper Ware for their own use, or for the market—as the best method of coopering with which we are acquainted.

Wilksbarre, Pa., July, 1856.

PRIESTLEY R. JOHNSON,
GEO. KNAPP,
GOULD P. PARRISH.
(Comprising the firm of P. R. Johnson & Co.)

We, the undersigned, have been using "Trapps Patent Barrel Machinery," manufactured by the "North American Machine and Coop-

erage Co." at Elmira, N.Y., for the last four years. After a thorough and practical trial, we can cheerfully bear testimony to its actual capabilities, and are satisfied that it will perform all that is claimed for it by the manufacturers. The quality of the work which it turns out (both tight and dry,) is unequalled ; and while the great amount of labor saved makes the capital expended a profitable investment, the perfect uniformity of the casks is a very desirable feature, and renders their sale rapid and immediate.

We have had an opportunity to examine the various kinds of Barrel Machinery in use, and have seen nothing but this which is thoroughly practical, and which commends itself to the sense of every man, whether a mechanic or not, its operation being simple and less complicated than any other, thus being susceptible of management by ordinary workmen. HEGGIE & BENNITT,

Elmira, N. Y.

M. H. FERRIS, Agent N. A. M. & C. Co.:

Dear Sir:—Your letter requesting my opinion upon your plan for making Cooper-work, is just received; and in reply let me say that, from four years experience, and from a careful and full examination of other plans, I have not the least hesitation in commending your plan as being decidedly the best I have seen, and a very great improvement upon the old mode of hand Coopering.

In my shop I should regard the machine as almost indispensable, and I would not part with it at ten times its cost, if another could not be obtained.

All the work we turn out (both dry and tight) gives the best possible satisfaction, and if requisite I could give you hundreds of certificates from those who have patronized us.

Indeed I place Trapp's Barrel Machine high upon the list of labor-saving and men-saving Machines, and am persuaded it must soon come into general use. It certainly accomplishes all I could ever ask of a Machine. It is simple in its arrangement, moderate in its cost, easily worked, easily kept in repair, and turns out the best quality of work as rapidly as men can well handle the stock ; and this surely is all that can be claimed of any Machine. If others have a better plan they are welcome to it; I am satisfied with this.

Yours, truly, JARED ARNOLD.

Jan. 10, 1857. Broad street, near Vine, Philadelphia.

My experience, it is true, has been less than Mr. Arnold's, but still enough to lead me cheerfully to endorse his statements above.

Yours, &c.

A. G. SECKEL, Broad-st., near Vine,
Philadelphia.

MR. M. H. FERRIS, Elmira.

We, the undersigned, practical Coopers, having been for some time employed upon Whisky, Provision and other Barrels, also Butter Firkins and Kegs, made by Trapp's Machinery from sawed staves, do hereby certify that, contrary to our previous opinion of sawed staves and machine barrels, we, without hesitation, pronounce them equally good as casks made by the best Coopers from rived staves.

S. H. ARMSTEAD,	New Haven, Ct.
SALEM JEPSON.	Hartford, Ct.
H. O. SEAGER,	Candor, N. Y.
ORIM JEPSON,	Hartford, Ct.
CHAS. GROESBECK,	Elmira, N. Y.
GARRET GROESBECK.	"
JOHN VAUGHAN,	"
M. M. SMITH,	Rushford N. Y.
MYRON NORTHROP.	Orange, Schuyler Co., N. Y.
JASON FROST,	Elmira, N. Y.
ISAAC RANDALL,	Wellsburgh, N. Y.
HARMON VAUGHAN,	Veteran, N. Y.
WILLIAM MILLER.	Elmira, N. Y.

January, 1857.

This may certify that we, practical Coopers, have used the staves made by the North American Machine and Cooperage Co., for Brandy 8th Casks, and that, if sawed out of good timber, we consider the work made with them equally good as work made from split staves.

N. &. H. O'DONNELL.

New York, January 5, 1857, 462 *Washington-st.*

This may certify that we are using Barrels made by the North American Machine and Cooperage Co., for both provisions and lard, and that they give entire satisfaction.

HARRIS MEDAY & Co., Packers, NewYork.

This is to certify that I have used the staves of the North American Machine and Cooperage Co., for making Vinegar Barrels, and consider them equally as good as the split staves for tight casks.

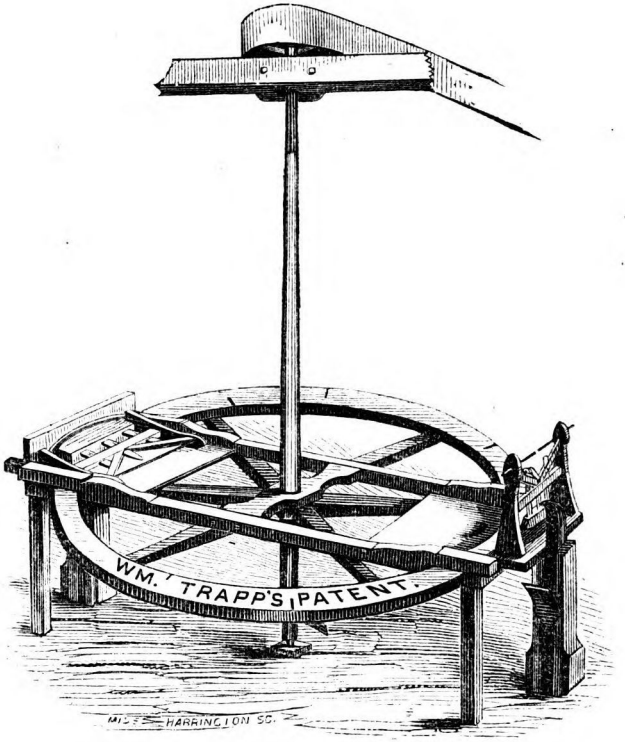
FREDERICK FRIES, Cooper.

Brooklyn, N. Y., Jan. 3, 1857.

This may certify that I have purchased and used the staves made by the North American Machine and Cooperage Co., and give as my opinion, that, if properly sawed from good timber, they are equally good with the split staves; and if dressed by their machines, will much relieve the labor of putting up casks by hand, and that tight work of the best quality can be made from them.

THO'S KENNEDY, Cooper.

New York, Jan. 3, 1857.



Jointer.

OUR MACHINES

Take the stock in the rough state, and turn out work ready for the Hooping process, as follows:

FLOUR BARREL MACHINES

Worked by seven men and boys, will make twenty-two Barrels to each hand in ten hours; double the number of hands can be employed, with the same result to each.

PORK BARREL MACHINES

Can be worked by from one to eight hands, making from twelve to fourteen Barrels per hand in ten hours.

BUTTER FIRKIN MACHINES

For both eighty and one hundred pound sizes, and ten and fifteen gallon Kegs, employing eight hands, make from sixteen to eighteen to each hand in ten hours.

WHITE LEAD KEG MACHINES

For twenty-five, fifty and one hundred pound sizes, employing six men, can turn out, in nice order, ready for hooping, three hundred Kegs, of an average size, in ten hours.

All other good, tight and dry work done with neatness, in the same proportion.

THE WAY TO GET OUT STOCK

WITH TRAPP'S PATENT BARREL MACHINERY.

WHISKY BARREL STAVES

Thirty-two inches long, one inch thick, four inches clear sap.

HEADING.—Two pieces, twenty-one inches long, one and one-eighth of an inch thick on the sap, one-half or three-eighths of an inch thick on the heart, and ten and a half inches wide.

PORK BARREL STAVES

Thirty inches long, three-quarters of an inch thick, and four inches wide, clear sap.

HEADING.—Nineteen inches long, one inch thick on sap edge, three-eighths of an inch on heart, and nine and a half inches wide.

HALF BARREL STAVES

Twenty-five inches long, five-eighths of an inch thick, and four inches wide, clear sap.

HEADING.—Fourteen and a half inches long, seven-eighths of an inch thick on the sap, one-fourth to three-eighths on heart, and seven and a half inches wide.

TWENTY GALLON CASKS

Twenty-six inches long, three and one-half to four inches wide, and three-fourths of an inch thick.

HEADING.—Sixteen inches long, one inch thick on sap edge, eight inches wide, and three-eighths of an inch on the heart.

FIFTEEN GALLON KEGS

Twenty-four and a half inches long, four inches wide, clear sap, and three-fourths of an inch thick.

HEADING.—Fifteen inches long, one inch on sap edge, seven and a half wide, and three-eighths on heart.

TEN GALLON KEGS

Twenty-two inches long, three to three and a half inches wide, clear sap, eleven-sixteenths of an inch thick.

HEADING.—Twelve and a half inches long, seven-eighths of an inch thick on sap, and six and a half inches wide.

FIVE GALLON KEGS

Eighteen inches long, two and a half inches wide, clear sap, and one and one-sixteenth inch thick.

HEADING.—Eleven inches long, three-fourths of an inch thick on sap, one-fourth of an inch on heart, and five and a half inches wide.

FLOUR BARRELS—RED OAK, &c.

Thirty inches long, four inches wide, and plump three-eighths of an inch thick.

HEADING.—Eighteen and a half inches long, five-eighths of an inch thick on sap, one-fourth on heart, and nine inches wide.

MOTION TO REGULATE THE RUNNING OF

Trapp's Patent Barrel Machinery.

Whisky Barrel Machines, 22 inch pulley, 7 inch face, 160 revolutions per minute.

White Lead Keg Machines, 12 inch pulley, 6 inch face, 250 revol'ns.

Other Machines, 18 inch pulley, 7¼ inch face, 165 revolutions.

Barrel Saws, 12 inch pulley, 800 to 1000 revolutions.

Half Barrel, &c., 9 inch pulley, 1100 to 1200 revolutions.

White Lead Keg, 25 lbs., 4½ inch pulley,
" " " 50 " 6 " " } 2000 revolutions.
" " " 100 " 7½ " "

Heading Saws, all 10 inch pulley, 1000 revolutions.

White Lead Keg Jointer, and all small work, 9 inch pulley, and six inch face, 250 revolutions.

All other kinds, Whisky, Pork, Flour, Firkin, &c., &c., 14 inch pulley, and 7 inch face, 175 revolutions.

Power to run	Barrel	Machinery,	about	5	to	6	horse	power.
"	"	Keg	"	"	3	" 4	"	"
"	"	Barrel Stave Saw,		"	5	" 6	"	"
"	"	Keg "	"	"	4	" 5	"	"
"	"	Heading	"	"	5	" 6	"	"

ADVANTAGES OVER HAND MADE WORK.

We make our own Staves and Heading, and make twenty-five per cent. more stock from the same amount of timber, saving thereby one-quarter in cost of material. Our staves are made perfectly straight, have the same hollow and round as when set up in the cask; are of an uniform thickness; are *jointed* more accurate, being mathematically true from one end to the other. Our casks are tighter, stronger, of equal weight and capacity, uniform in appearance, and perfectly *water-tight*. They cost about one-third less than the same article made by hand, and will sell for considerable more in any market.

ADVANTAGES OVER ALL OTHER MACHINES.

We cut our staves from the *bolt*, and not from the sawed plank; our staves are sawed, not cut with a knife, (which shatters the timber;) we do not steam our stuff, (which loosens the fibres of the wood;) our staves are sawed *with the grain*—all others are made *cross grain;* we do not joint our staves until the stuff is thoroughly seasoned; we make our joints and bevel with mathematical precision, whatever the width may be, all staves, whether wide or narrow, having their proportionate bilge and bevel; there is but little waste in stock, as we make the width of each stave to suit the size of the bolt; our staves are each the segment of a circle, and when set up the cask is necessarily perfectly round, which makes the head as tight as any other part of the cask. Our casks are all perfectly water-tight, and smooth inside and out.

Prices of Machines for Barrels, Kegs, &c., without Saws.

Hogsheads,	$1,800
Rice Tierces,	1,600
Whisky Barrels,	1,400
Pork and Beef Barrels,	1,000
Flour Barrels,	850
White Lead Kegs, 25 and 50 lbs.,	1,000
White Lead Kegs, 25, 50 and 100 lbs.,	1,200
Butter Firkins,	900
Shook Machine,	1,200
Pork, Beef, Flour, on same bench,	1,300
Barrel, and Half-Barrel for Fish,	1,500
Powder Keg Machine,	500

Prices of Stave and Heading Saws, to go with Machine.

Hogshead,	$350
Whisky,	150
Pork, Flour, or Beef,	125
Butter Firkin, or Half-Barrel,	75
One set of White Lead Keg,	100
Heading,	75

Prices of Stave and Heading Saws, without Machine.

Hogshead,	$350
Whisky,	175
Pork, Flour, or Beef,	150
Butter Firkin, or Half-Barrel,	100
One set of White Lead Keg,	150
Heading,	75

For a Machine to manufacture tight work, you will require one pulley on main shaft, thirty-four inches in diameter, not less than eight inches face, to drive the pulley under the machine bench; also on main shaft, a pulley twenty-four inches diameter, seven inch face, to drive a short shaft, (not less than ten feet long,) over head at one side of the shaft, for the purpose of driving the Heading Jointer, and Doweling or Boring Bits; also another pulley on main shaft, thirty-four inches diameter, not less than eight inches face, to drive the Stave Jointer. On one end of the short shaft, which should be one and three-fourths or two inches in diameter, should be two pulleys fourteen inches diameter, three and one-fourth inch face, one tight, the other loose; also on short shaft, two pulleys eighteen inches diameter, from three to four inch face; one of these pulleys to drive the Head Jointer, and one the Dowel Bits.

NORTH AMERICAN

Machine and Cooperage Company

SUCCESSORS TO

W.M TRAPP & CO.

Having purchased the entire interest of Wm. Trapp, Jr., i
Barrel Factory, also, the right to manufacture under his P
(Mr. Trapp having retired from the business,) we are prepa
furnish, at the shortest notice, Machinery for making all kin
Cooper Work, from the smallest White Lead Keg up to the l
Cask in general use, such as Kegs of all sizes, Butter Firkin
Tubs, Pork, Beef, Flour, Whisky, Oil and Molasses Barrels.
and Heading Saws furnished on short notice.

☞ We are also the owners of all the Unsold Territory.

North American machine and cooperage co.

Trapp's patent barrel machinery